

# CALVER MILL AND ITS OWNERS: A SUPPLEMENT

By M. H. MACKENZIE

**S**HORTLY after my article on "Calver mill and its owners" in the last volume of this *Journal* went to the press, the Pares papers were deposited at Derby Central Library. I knew they would throw light on my subject, for the name, John Pares of Leicester, had appeared in the articles of agreement, but how much they would contribute to the history of the mill I did not foresee. About the same time my attention was drawn to the Calver accounts in the Quarry Bank records at Manchester Central Library, and recently to deeds and account-books relating to Calver mill now at the Derbyshire Record Office. In the light of this new evidence I want to correct two mistakes I made in my first article. I knew that, contrary to local tradition, Sir Richard Arkwright did not build Calver mill. I had a certain number of facts, but some pieces in the jig-saw were missing; I did not find them until June 1964 in the Pares correspondence. The most important missing piece was the secret compact between Arkwright and the Pares and Gardoms. This information, together with Mr. J. Somerset's suggestion that the small mill could have been built about 1778, makes the first seven years of Calver's history drop into place. Secondly, I accepted too readily the laudatory paragraphs on Sir William Heygate, which I found in books dealing with the officials and bankers of the city of London.<sup>1</sup> It is difficult to relate the versatile and philanthropic business man of these publications with the schemer of the letters. He appears to have been vacillating and evasive, capable of meanness and cruelty and only prepared to follow a consistent course of action, if it served his own ends.

But before turning to the work of revision, we can learn from this correspondence something about the Leicestershire family that promoted the building of Calver mill. Thomas Pares of Hopwell (1716-1805) came of Whig stock and counted among his ancestors several mayors of Leicester and in Henry IV's reign a sheriff of the county. An attorney at law with interests in the hosiery trade, by his ability, intelligence and hard work he made money; he invested his savings in the Hopwell estate, which though situated in south Derbyshire was fairly accessible from Leicester. His portrait hangs in the St. Martin's branch of the Westminster bank, Leicester, but it was his son, the second Thomas, also an attorney, who opened the Leicester bank in

<sup>1</sup> *D.A.J.*, LXXXIII (1963), 32.

1800. The father's financial transactions were really confined to lending money at interest. John, his second son, was a hosier who lived in his large house in the Newarke, part mansion and part warehouse. From the Pares correspondence we can see how this family business was organized in a truly patriarchal spirit by the old father. He and his sons were a unit, bound to each other in purpose, discipline and affection. The latter, though grown men, took their orders without demur. Each would begin a letter to his father with "Hon'd Sir", and sign himself "Your affect. and dutiful son".

During the law terms Thomas Pares, junior, resided at Gray's Inn and acted as his father's London agent. Three or four times every week — in a crisis every day — he received his instructions, each item detailed with meticulous care under the appropriate heading. Papers that his son might need — a will, a recovery, a lease, a draft on a London bank — were parcelled up and sent by coach to London together with Tom's clean linen. The laundry presented problems: "All your cotton stockings being in the wash you must wait for 'em till the next parcell," his father wrote, and two days later they were sent with the kindly admonition, "air your Cotton Stockings well before you put 'em on." Every contingency was foreseen and provided for. Tom was pleading in the London courts and his last year's sacrament certificate would soon expire, so on 30 June 1787 he was reminded to make arrangements to take the sacrament during the next quarter. If his father wanted to stay in London Tom must find him a bedroom and sitting-room in Cork Street or Old Burlington Street, "perfectly clean and proving free from the dreadful vermin". If because of pressure of work Tom missed a post, in the next letter there would be a reprimand. Tom's servant always met the Leicester coach and was ready to dispatch his master's replies with perhaps some family shopping or a basket of fish from the market. And so from 1765 for about thirty years this correspondence was carried on between father and son and we are fortunate that a good deal of it has survived. Tom was a Fellow of the Society of Antiquaries, scholarly and retiring; we wonder how he regarded this busy life.

We have a certain number of John's letters but, because he lived in the same town as his father, regular correspondence was not necessary. But in the 1780s he went from time to time on his travels with his wife and two small children to inspect his two cotton mills of Calver and Caton. His family would stay at Matlock, while he rode over to Calver and, when in Lancashire, they stayed with his wife's people at Wavertree while he went on to Caton. John Pares was destined to live out a long active life in Leicester, to be the father of a large family and sheriff of the county in 1802, but he was as respectful and obedient to his father as his brother was.

It was natural that in 1778 John Pares of Leicester and John Gardom of Bubnell should make common cause; both were hosiers and yarn merchants and wanted to avail themselves of Arkwright's new methods of spinning.<sup>2</sup> This had already been done by a few enterprising people, who had made a

<sup>2</sup> *D.A.J.*, LXXXIII (1963), 26.

secret compact with Arkwright for the privilege of using his water-frame and carding-machine. They were called licensees and, of course, paid heavily for the privileges they had acquired. From letters written in 1783, after the dispute had broken out between the licensees and the Arkwrights, we can roughly piece together how the coveted permission was obtained.<sup>3</sup> Arkwright and Strutt would meet the applicant, and, as Mr. Alexander Bosley seems to have been the lawyer acting for Arkwright, the meeting may have taken place in his office in Bakewell, where he would have the articles of agreement. The terms were as follows: £2,000 was payable for the use of the water-frames (this patent would expire in the summer of 1783), and £5,000 for the use of the carding-machines (this patent would expire in December 1789): the licensee was required to warrant the two patents during the period they were in force: he had to promise that he would not divulge the patent and that he would not work the machines in excess of a stated number of hours per day. It seems to have been Arkwright's practice to keep the copy of the articles of agreement; the licensees had to rely on memory.

In 1778 John Gardom became an Arkwright licensee and, as from Lady Day 1778, took a 21 years' lease of the Calver Bridge site from Thomas Eyre of Hassop. The next step probably was the building of the small mill, marked on the 1831 Fairbank map of Calver as the "old mill".<sup>4</sup> We can be certain that the Gardoms and Pares would try to put it into production as soon as possible after 25 March 1778. The rent for the site was £100 p.a. and Arkwright's charges were very high. Little remains of this cheaply and roughly constructed building today, but, before it was partly destroyed by fire in 1937, it was three storeys high and, during the experimental period, 1778-85, would have been adequate to house the new machinery. The people of the district, learning that Arkwright frames had been installed in a new factory at Calver Bridge, probably jumped to the conclusion that here was another Arkwright mill. This was the story that Bray picked up.<sup>5</sup> They knew nothing about licensees and secret agreements, and John Gardom was pledged not to speak.

On the above hypothesis the small mill at Calver was built in the summer of 1778 and for the first three years was presumably working satisfactorily. In June 1781 Arkwright lost his carding patent and, for the next four years, this defeat embittered his relations with the licensees. If it was now legal for anyone to make his own carding-machine, the licensees were not going to pay fees for the privilege of using Arkwright's. On 25 April 1782, Thomas Pares of Hopwell wrote to his son at Gray's Inn: "Mr. Gardom has wrote Your Brother that Mr. Arkwright peremptorily insists upon payment of the 1000£ which became due the 1<sup>st</sup> of last month & will probably soon endeavour to enforce it." The younger Thomas was instructed to take legal advice on what the Gardoms could do if Arkwright stopped the big wheel and brought

<sup>3</sup> Pares correspondence (PC), 1 June 1783.

<sup>4</sup> Fairbank, Bak I L, Sheffield City Library (SCL). It is odd that before the Fairbank map there is no mention of the old mill. The Gardoms almost certainly would have built it.

<sup>5</sup> W. Bray, *Tour into Derbyshire and Yorkshire*, 2nd ed., 118.

the factory to a standstill. "What occurs to me," the letter goes on, "is in that case to tell him (Arkwright) that it's apprehended he has no right to Distrain, having been already paid more than is due to him or rather than he is intitled to." Thomas Pares wanted to manœuvre Arkwright into a false position, so he chose his ground for an attack carefully. If it could first be shown that the carding patent had been invalid from the beginning, then the case against the water-frame could be pressed home — not that it mattered so much, for this patent expired in the summer of 1783. The licensees took counsel among themselves, and on 6 May 1782 it was reported that Mr. Robinson of Bulwell had paid up and come to terms with the Arkwrights, but the rest seem to have held out. Thomas, in London, must have been kept very busy, dealing with the fresh suggestions that his father made every week. The opinions of the attorney-general and of distinguished barristers were taken, but they often disagreed and their fees were always high. During the years 1782 and 1783 there are so many references to the case of Arkwright *v.* Gardom that a lawsuit seemed inevitable, but there is no proof that there was anything more than an "Inquiry", which proved costly.<sup>6</sup>

The wily old Leicester attorney thought it was better to play a fencing game. Outwardly, he maintained a correct attitude towards the Arkwrights and was always ready to go or to send his son, John, to discuss the Calver question, but, though both sides expressed their desire for an amicable settlement, these meetings achieved nothing.<sup>7</sup> Meanwhile the Gardoms paid no dues and Thomas Pares of Hopwell continued to pursue a policy of apparent inactivity. He was delighted that the "Manchester People" were organizing a petition against the extension of the Arkwright patent, but, when asked to get up a similar petition in Leicester, on 6 March 1783, he wrote to Tom: "I did not put a Negative, neither did I give an Assent or mean to promote one."

In the summer of 1783 the Arkwrights scored a point against the recalcitrant Gardoms. When the latter were told that they must pay because they had warranted the two patents, they declared that in 1778 they had refused to warrant. John Pares, who from his recollection of the original conversations doubted the veracity of this statement, called on John Gardom at his home in Bubnell and got the truth out of him; he had warranted the patents. In his chagrin and exasperation Thomas Pares wrote to his son in London on 31 May 1783: "to my great, very great astonishment, I find what Mr. A. asserts is true, . . . so that I expect they'll not only be obliged to pay the money but also with the discredit of attempting to dispute the performing their own agreemt which is vexatious beyond measure . . ." The following day, a Sunday, John went over again to Calver to probe "this unpleasant subject"; he handled the visit with his usual prudence and deference to his father's wishes. "Slept last night at Disley," he reported, "and came from thence early this morning in a Post Chaise in which I mean to return this evening & shall take all the care I can to prevent any knowledge of my

<sup>6</sup> PC, 22 May 1783, 1 Oct. 1785.

<sup>7</sup> PC, 11 May, 5, 6 July 1782, 19, 21 May 1783.

journey hither. I intended seeing Mr. Bosley who was present at the only meeting I ever had with Mr. A. and Mr. Strut (the time when the Articles were executed) that I might have known what he cou'd recollect of the Conversation, but, since the receipt of Your Letter I have declined seeing him, nor will he know of my having been here."

But the record is not entirely taken up with attempts to outwit the Arkwrights. Calver was proving a financial success, and on 8 October 1784 John Pares, who had been examining the books at the small mill, could write to his father, "that we had closed the Account of last Year's business very satisfactorily".

This was encouraging, and we would expect both families to be considering expansion and Thomas Pares to be thinking of raising a loan; at this date he seems to have been short of capital.<sup>8</sup> On 17 February Arkwright won his case against Peter Nightingale and recovered his patent rights over the carding-machine. There is an important letter from Thomas Pares to his son, Tom, written just after he had received this bad news. It is cryptic, tantalizingly short and jotted down in agitation. John, who was expected home the next day, was engaged in "consultation"; he was probably negotiating a loan with the Arkwrights for the erection of the first large mill.<sup>9</sup> Thomas Pares was in an awkward position, but he could not allow loyalty to the Gardoms to deprive him of this chance. The law had suddenly changed and the Gardoms, who for some years had been working their carding-machines overtime, "wou'd be liable to the Penalty on Account of the Extra Hours". On this occasion he was not going to support the Gardoms against the Arkwrights. Unfortunately there is no clue in this correspondence as to how this problem was resolved. There are no direct references to a loan from the Arkwrights, to the building of the first large mill<sup>10</sup> nor to the reversal of fortunes in July, when Arkwright again lost his patent, this time permanently. But from John's letters that summer we realize that the pace at Calver Bridge was quickening. "I write this from the Mills," he reports to his father, "where I came early this morning & found all well —," and again, "I was at the Mills on Saturday & yesterday, & find everything there going on to my wish, the last week's business was near 27,000 hanks — which exceeds what we supposed possible to be done." His letter of 8 October 1785 is a very good report on the year's working:

"We closed our statement on Thursday morning & I have the pleasure to tell you the year's business produced £4750, so that after deducting £1050 for A's last payment & reducing the value of our Building £100, there remained 3600£ to divide & 5 p. cent paid for the Capital employ'd. The advance upon Cotton Wool is now heavy against us, but being released from further claims by A. we have still a favourable prospect of its being a good business — we are fortunately provided with Wool for at least 5 Months both at Calver & Caton, bought on moderate terms, but the command

<sup>8</sup> Mr. Tempest, an Arkwright licensee, had not paid back his loan and for several years this bad debt embarrassed Thomas Pares' finances.

<sup>9</sup> The wording of a letter (3 March 1785) and the reference to capital borrowed at 5% (8 Oct. 1785) could be consistent with this interpretation, but there is no definite proof.

<sup>10</sup> According to the Goddard tradition built between May 1785 and May 1786.

of 2000 or 3000£ a week or ten days ago wou'd have been lucky, for the Article has advanced to 15% in that time & is still going up."

The Gardoms had at last compounded with the Arkwrights, the small mill was paying well and John Pares was proving a very capable entrepreneur; but the family lacked capital.

John Pares' letters end about this time, though he remained a shareholder up to 1824, and sometimes we can see that he was making policy. After John Gardom's death in 1788 and the formation of the Calver mill company in 1789, we would expect changes in management, but, as no Gardom correspondence has yet come to light, we know very little about the people who were running the mill between 1789 and 1824. It is disappointing that Thomas Gardom has left no record of himself or of his banking activities.<sup>11</sup> The Pares letters continue to be very interesting, but they deal mainly with the new banking business of Heygate and Pares, with John Pares' large family and, in particular, with the career of his son, the third Thomas Pares. We can follow him from Eton to Trinity College, Cambridge, thence to the Temple and in 1818 to the House of Commons as M.P. for Leicester, a young Whig with advanced opinions on reform.

Fortunately a few of the Calver deeds cover this period and in the preambles supply some useful information. In the early days, flooding and drought were serious problems. The Derwent floods of 1799 not only swept away Calver Bridge, but also the weir at the mill.<sup>12</sup> Production must have been brought to a standstill. In May 1802 the first big mill was burnt down. Either between 1799 and 1802 or during the rebuilding period, 1803-4, the new goit was cut, "extending from the River Derwent — near the New Bridge on the Sheffield Turnpike Road to the Dam adjoining the premises — which New River or Goit was formerly made by Thomas Gardom and John Pares".<sup>13</sup> It was a big undertaking and proved to be only the first of several attempts to increase power and control flooding. In another deed is a summary of the 1804 articles of co-partnership. Four of the original shareholders had survived: the two Gardom brothers, Thomas and George, who held  $\frac{7}{16}$ th shares, and John Pares and James Heygate, two partners in the Leicester bank, who also held  $\frac{7}{16}$ th shares; Horatio Mason, William Gardom's executor, had taken up his friend's shares. In this preamble Calver mill at the turn of the century is described as "a considerable Cotton Work", rebuilt after the fire by the shareholders, "for the purpose of carrying on the Trade or Business of Spinning and Manufacturing Cotton". So calico was woven at Calver.<sup>14</sup> During the slump before and after Waterloo, Calver's reputation in the cotton world stood fairly high, and the mill faced hard times more successfully than Caton. Isaac Hodgson, the manager of Caton and related to the Pares and Gregs, tried for several years to sell his mill, and, when

<sup>11</sup> Apart from the references in Captain Jonathan Peake's case (P.R.O. C.13/463), it is clear that Thomas Pares had an interest in banking: he was a partner in the banking firm of Hodgson, Capstick & Co. 23 Dec. 1826, Calver deeds (CD), Derbyshire Record Office.

<sup>12</sup> Oakes deeds, no. 1500. S.C.L.

<sup>13</sup> CD, 18 March 1844.

<sup>14</sup> CD, 23 Dec. 1826.

he left it in 1818, his one ambition was to be taken into the Calver partnership and to get Horatio Mason's orders.<sup>15</sup>

As the year 1824 approached, important decisions had to be taken concerning the future of Calver mill. The lease would expire in that year, the three Gardom brothers were dead, the younger generation did not wish to go into the mill and the two senior shareholders, John Pares and James Heygate, senior, announced their intention of retiring from the co-partnership. That left Horatio Mason with his small quota of shares; from one of John Pares' letters it is clear that Mason was worried about his future and probably expected the concern to be sold. But the Pares and the Heygates opted for the renewal of the lease. As John Gardom's son, Thomas, was an M.P., James Heygate's two middle-aged banker sons, William and James, became the principal shareholders and Horatio Mason was brought into full partnership. It was the wrong decision, but in July 1824 he was elated at his promotion.<sup>16</sup> For over twenty years he had given good service to the Gardoms and Pares, perhaps because he had been helped by John Gardom's wisdom and experience; his new colleagues possessed neither quality. The next problem was the settlement with the Gardom family; the negotiations were difficult and protracted. Anthony Radford Strutt valued the mill at £16,595. Horatio Mason was disappointed at the figure, but he accepted it with Samuel George Gardom (George's son),<sup>17</sup> John Pares and James Heygate, senior. Thomas Gardom's trustees rejected it for themselves and for the family. They criticized the management for its inefficiency, and demanded that a determined effort should be made to get in the bad debts and to sell the concern.<sup>18</sup> They were eventually persuaded not to take legal action on being offered more generous terms, but the points they made are worth remembering when we consider Calver's financial record during the following years.

In the autumn of 1830 the families of Pares and Heygate received a shock. Sir William Heygate discovered that his brother, James, had been embezzling bank funds and that the accounts for which he had been responsible at Aldermansbury were in disorder. "In short," Isaac Hodgson wrote to young Thomas Pares, "if half we hear is true, there is a complete mess."<sup>19</sup> On the afternoon of the discovery Sir William Heygate seemed to be acting with promptitude and resolution: "I transferr'd the whole balance at £11,000 to our new Account — which did away James's power to draw Checks," he wrote to Leicester. "In your arrangements dispose of me as you please & think best for the other partners but I will omit no effort to assist in rescuing

<sup>15</sup> PC, 20 Dec. 1818, 1 Jan. 1819, 8 May 1820.

<sup>16</sup> P.R.O. C.13/463, p. 2; *D.A.J.*, LXXXIII (1963), 32.

<sup>17</sup> From the wording of George Gardom's will, I wrongly concluded that Samuel George Gardom did not attain the age of 21.

<sup>18</sup> PC, 5 April, 18 May 1824; CD, 23 Dec. 1826.

<sup>19</sup> PC, 28 Sept. 1830. In the partnership of Pares and Heygate, the Pares family had always been the senior partners and in charge of the Leicester bank. James Heygate, senior, was manager of the London branch at Aldermansbury and his two sons, Sir William and James, junior, were connected with this office. On the retirement of John Pares and James Heygate, senior, at some date shortly before 1830, Isaac Hodgson, not James Heygate, junior, was appointed manager of Aldermansbury.

their property." Thomas Pares, who was now taking over the management of the Leicester bank from his father, acted with equal promptitude: on 14 September 1830, notice of the dissolution of partnership of the firm of Pares and Heygate was gazetted. But, as the magnitude of James Heygate's defalcation became apparent, Sir William reduced his offer of a blank cheque to the fixed sum of £40,000 and then to £10,000, which old John Pares on 22 December rejected as insulting. He and his son, Thomas, took a simple and clear-cut view of the matter: the interests of the bank's customers must come first, the bank was now very short of capital, the Heygates were, therefore, bound in honour to sell out their investments to strengthen the bank's reserves. For two years Sir William Heygate evaded the issue in his long rambling letters, full of platitudes and generalities, but at length Thomas Pares made him accept liability for the sum of £23,400. 15s. 2d., payable in three instalments on 31 December of 1836, 1837 and 1838. Thomas Pares shouldered responsibility for £14,747. 5s. 4d., sold the Newarke and retrenched.

Sir William had, apparently, made up his mind that Calver would provide him with financial salvation. It had already provided him with counter-arguments when pressed to sell: he had heavy legal and moral responsibilities towards poor Mr. Mason and his large family. What he really envisaged was that the mill should be made to pay, so that Calver notes would be accepted by the bank in discharge of his liabilities. But this hardly seemed a realistic appraisal of the situation, for in 1834 the balance sheet showed that Horatio Mason had run the mill at a loss for ten consecutive years. In November Sir William visited Calver and made Horatio Mason sign a statement to the effect that, in the event of dissolution of partnership, he would pay over to Sir William Heygate £16,700, "as a satisfaction for his share and interest in the said concern". The latter now had a defence in his pocket against pressure by Thomas Pares. There were some better years: on 1 January 1836, there was a profit of £9,000, but at the beginning of 1839 Sir William Heygate and Horatio Mason were both in straitened circumstances. On 9 January 1839 Thomas Pares sent Sir William a sharp reminder that he had "omitted to make the necessary payments".

The rest of the story is known. Mason's friends would have helped him with a loan, as they had done in the past, but Sir William Heygate forestalled this move by filing a bill in Chancery and compelling Horatio Mason to execute the 1834 agreement. The £16,700 must have been a windfall to him, easing his hand to mouth finances for a few months.<sup>20</sup>

Horatio Mason left Calver in the summer of 1839 a bankrupt, and the next year Sir William Heygate brought Alfred Crompton Bentley into the co-partnership as resident manager. He was responsible for improvements before the stimulus of Greg management.<sup>21</sup> Sir William was still intent on making the mill pay, the more so as his health was precarious and he was leaving his family badly off. He had always known that the goit and water machinery

<sup>20</sup> P.R.O. C.13/463.

<sup>21</sup> S. Bagshaw, *Directory of Derbyshire*, 1846, 423.



needed further reconstruction and in 1833 had employed an engineer from Stockport to give his opinion. He suggested cutting a new goit into the existing goit to discharge the water at a point in front of the mill, instead of in the mill yard.<sup>22</sup> It was probably Alfred Bentley who put into execution a version of this plan. The new goit was smaller than the one originally proposed, but it was adequate to drive two large wheels, "which", Bagshaw noted, "are considered the best constructed in the county". At the time of his death Sir William Heygate was negotiating with the duke of Rutland for permission to change the position of the weir by Froggatt Bridge "and to make one near the same place more suitable for discharging flood waters". This problem was tackled after his death by the Heygate family, but without much success. The new weir was damaged by the rising of the river in February 1848, "by reason", Alfred Bentley and Robert Greg asserted, "of the unsubstantial and unworkmanlike manner in which the works of the said weir were executed". The Heygates had to pay £200 in compensation, but flooding at this point remained a problem.<sup>23</sup>

During the last six months of his life Sir William Heygate achieved yet one more aim; he legally bound his brother's family to pay to him and his heirs the sum of £9,750 with interest. On 18 March 1844, he obtained a new lease of Calver mill for 21 years from the earl of Newburgh: on 26 August by an underlease he brought in his nephew, James Unwin Heygate, as co-partner with Alfred Bentley: on 27 August he made all the men of the Heygate family, including the delinquent, James, endorse the statement that the new lease had been made to secure payment to him and his heirs of the sum of £9,750 with interest out of the profits of Calver mill: on 28 August he died. He had extracted from Calver mill the two sums of £16,700 and, in round figures, £10,000.<sup>24</sup>

Young James Unwin Heygate of Southend retired from the co-partnership two years later. By standing in for his uncle in 1844, perhaps he had done all that was required of him; he assigned his interest to Robert Greg, together with the responsibility for the £9,750. Calver now became one of a group of mills, managed from Quarry Bank mill. With the reconstruction of the water machinery and the introduction of gas lighting two years later, the mill had become more efficient and to judge from the following table was paying reasonably well.<sup>25</sup>

*Comparison between Quarry Bank and Calver, 1847-64*

	<i>Quarry Bank</i>	<i>Calver</i>	<i>Difference</i>
	£	£	£
Total losses	11,373	8,946	2,427
Total profits	25,492	19,819	5,673
Additions of machinery	4,539	11,372	6,833
Value in 1864	12,450	12,957	507

In addition the debt to the Heygates had been paid off; Greg management was good.

<sup>22</sup> S. Bagshaw, Map 675, 1833. S.C.L.

<sup>23</sup> CD, 3 Nov. 1845, 14 March 1849.

<sup>24</sup> CD, 15 May 1861.

<sup>25</sup> Quarry Bank records, Manchester Central Library.

When Tolson and Gibb took the mill over in 1864, Hassop station had just been opened, and the railway was soon to bring raw cotton almost to Calver's door. Previously, the wagons had fetched it from Chapel-en-le-Frith on the Peak Forest canal, but this new asset did not arrest the steady decay of the mill. Two account books still exist and an analysis of half-yearly profits from 1868 to Mr. Tolson's death in 1876 shows that only three times did profits reach four figures; twice there was a loss and most years the mill provided a poor living for the partners.<sup>26</sup> When Mr. Gibb retired in 1899, he was destitute.

On taking over the management with Mr. Kershaw in 1899, Mr. Massey announced that he intended to make Calver mill pay. At this date the water-powered mill was ceasing to be competitive; it needed reconstruction, usually with the introduction of turbine engines. Mr. Massey certainly introduced auxiliary power, but his basic methods were simple. He worked the mill night and day in two shifts, he installed a gas engine, so that, when the water was low, there was always an alternative form of power, he concentrated on doubling and spent as little as possible on repairs. He gave up in 1920, because he was an old man and had made sufficient money to retire, so we cannot tell whether this kind of business could have survived the economic blizzards of the 1920s. The days of the water-powered mill were over.

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<sup>26</sup> Derbyshire Record Office.